



A STUDY OF COMPUTER PHOBIA AMONG HIGHER SECONDARY SCHOOL TEACHERS OF DIFFERENT GENDER AND BOARD

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ABSTRACT

Computer phobia denotes various kind of phobia which teachers face in teacher-learning process in their daily life. It indicates the avoidance or fear of learning the new skills required for using computers at work place by higher secondary school teachers. The objective of the present study was to analyze the variance (if there) in computer phobia among higher secondary school teachers in references to their gender and board. The descriptive survey method and stratified random sampling technique were used. 117 male and female teachers were selected from higher secondary schools of different boards -C.B.S.E U.P board and I.C.S.E board. Computer Phobia Scale constructed and standardized by Dr. S. Rajasekar and Dr. Vaiyapuri Raja was used as tool. Investigation revealed that in reference to the computer phobia, there is a significant difference among higher secondary school teachers of different gender and board but board as a single variable do not play significant role in this reference.

KEYWORDS: Computer phobia, Higher Secondary School Teachers, Gender, Board

INTRODUCTION:

Computer based technology has played a major role in advancement in every field of human life. In educational institutions, computer has become an indispensable tool for making teaching learning process effective as well as in administering, managing daily institutional life because with its help record of attendance, accounts of income and expenditure, annual results etc. can be easily prepared, stored and retrieved without error. So, computer literacy is very important in every institutional settings including education.

No doubt, a person's attitude towards computer may depend upon his/her ability to work with computer effectively, which may later influence his/her professional efficiency but some people have an irrational fear of computers or working on computers. Symptoms of cyber phobia, a form of technophobia, include feeling anxious or paranoid with anything computer-related. Some teachers also don't want to work with computer. They distrust or scared by computer. They feel a kind of phobia, called 'computer phobia'. 'Computer phobia' term also named as 'cyber phobia'. It is the fear of computers or working on a computer. The term started in 1985 and originally meant an aversion or anxiety caused by technology.

Computer phobia denotes various kind of phobia which teachers face in teacher-learning process in their daily life. In present study 'computer phobia' is associated with anxiety of teachers about using computers or not being able to teach and learn successfully through computers. It indicates the avoidance or fear of learning the new skills required for using computers at work place by higher secondary school teachers.

Ajayi, A., Olatokun, W.M., & Tiamiy, M. A. (2001) investigated the prevalence and correlation of computer-related behavioral variables - Information anxiety, computer phobia, obsessive computing and computer work stress among students and the staff. Information anxiety and observe computing were prevalent among the respondents, but C.P was not. Work stress connected directly with both anxiety and computer phobia, and computer experience correlated inversely with information anxiety, computer phobia and obsessive computing. Mcilroy, D. C., Sadler & Boojawon, N. (2007) conducted a study aimed to investigate the effect of computer self-efficacy and computer anxiety on university's student's attitude towards e-learning. The result of this study showed that the computer self-efficacy had a significant positive effect on total score of students' attitude towards e-learning. In addition, the higher the students computer anxiety scores, the lower their attitude towards e-learning. In 2009, Ursavas & Karal conducted a study for assessing pre-service teachers' computer phobia levels in terms of gender and experience and found that computer phobia of male pre-service teachers does not statistically depends on their gender and there is a negative and intensive relative between computer experience and computer anxiety.

Ursavas, & Others (2011) conducted a comparative study on computer phobia among students of United Kingdom and Turkish University Students with reference to culture group difference, regularity of use (or home use) and use of university computer facilities. Results suggested that computer confidence (implying motivation and engagement) should not be assumed to exist in the agenda for wider participation. Also within and between group differences indicated that there is no typical or stereotypical student profile in approach to computer activ-

ity. Tzu Kate-Ching Chen (2012) conducted a study on elementary EFL Teachers' computer phobia and computer self-efficacy in Taiwan and found that teachers who frequently used computers showed lower computer phobia.

Present study is important for teachers as in the process of enabling the teachers with computer literacy, it is essential to know their problems related to computer uses. Educationalist may benefit through findings which revealed the extent of computer phobia teachers have and they may explore the causes of their phobia. Through present study the researchers wanted to know what teachers actually think whether they have positive or a negative attitude towards computer and what causes of it are. It was quite interesting to explore the effect of gender and board in this reference.

OBJECTIVES OF THE STUDY:

The objectives of the study were as follow:

- To analyze the variance (if there) in computer phobia among higher secondary school teachers in references to their gender and board.
- To test the significance of difference (if any) in computer phobia among higher secondary school teachers on the basis of board.
- To find out the significance of difference (if any) in computer phobia among higher secondary school teachers on the basis of gender.
- To verify the significance of difference (if any) in computer phobia among CBSE board higher secondary school teachers of different gender.
- To verify the significance of difference (if any) in computer phobia among ICSE board higher secondary school teachers of different gender.
- To test the significance of difference (if any) in computer phobia among UP board higher secondary school teachers of different gender.

HYPOTHESES OF THE STUDY:

The hypotheses of the study were as follow:

1. In reference to the computer phobia, there is no significant variance among higher secondary school teachers of different gender and board.
2. In reference to the computer phobia, there is no significant difference among higher secondary teachers of different boards.
3. In reference to the computer phobia, there is no significant difference among higher secondary school teachers of different gender.
4. There is no significant difference among CBSE board higher secondary school teachers of different gender in reference to their computer phobia.
5. There is no significant difference among ICSE board higher secondary school teachers of different gender in reference to their computer phobia.

6. There is no significant difference among UP board higher secondary school teachers of different gender in reference to their computer phobia.

RESEARCH METHOD:

To achieve the objective of the study the 'Descriptive Survey Method' was the best suited method and therefore, applied by the researchers.

Population: All the male and female teachers of higher secondary schools of U.P board, C.B.S.E board, and I.C.S.E board of Bareilly city.

Sample and Sampling Technique: In the present study, the investigators have used stratified random sampling technique. Finally, 117 teachers (51 male and 66 female teachers) were selected from 12 schools of different boards (4 were selected from each board) out of them 37 were from C.B.S.E board schools, 37 from U.P board schools and 43 were from I.C.S.E board schools.

Tool Used for the Study: Keeping in mind the objectives and nature of the study presented, the researchers have decided to choose the Computer Phobia Scale constructed and standardized by Dr.S.Rajasekar and Dr.Vaiyapuri Raja.

Statistical Technique: To analyze and interpret the result, to test hypotheses and draw inferences, Mean, Standard Deviation (S.D.) 'T' test and F-test as statistical measures were employed

ANALYSIS OF DATA & INTERPRETATION:

Table 1

Analysis of Variance among Higher Secondary School Teachers of Different Gender & Board on Computer Phobia variable.

Source of Variance	Sum of Squares	df	Mean Square	'F' value	Level of Significance
Between Groups	11590.25	5	2318.05	4.84	Significant at 0.01 level
Within Groups	53130.81	111	478.65		

Table-1 showed the analysis of scores of six groups -- G1(CBSE Board Male Teachers), G2(CBSE Board Female Teachers), G3(ICSE Board Male Teachers), G4(ICSE Board Female Teachers), G5 (UP Board Male Teachers) and G6 (UP Board Female Teachers). The analysis revealed that all these six groups were significantly differ as the calculated 't' value ($F=4.84$, $p=0.01$) was found to be higher than table value at both the level 0.01 & 0.05. The analysis of variance showed that in reference of computer phobia among higher secondary school teachers, gender & board play a significant role. On the basis of this result, the first hypothesis was rejected.

Table 2

Analysis of Variance among Higher Secondary School Teachers of Different Boards on Computer Phobia variable.

Source of Variance	Sum of Squares	df	Mean Square	'F' value	Level of Significance
Between Groups	1833.27	2	916.63	1.87	NS
Within Groups	55933.65	114	490.64		

Table-2 revealed the analysis of variance among three groups of higher secondary school teachers of different board - G1 (CBSE Board Teachers), G2 (ICSE Board Teachers) and G3 (UP Board Teachers). Analysis showed that these three groups were not significantly differ with each other on computer phobia variable as the calculated F- value was found to be ($F=1.87$, ns) less than table value at both level of significance which shows that board does not play any significant role for difference among higher secondary school teachers in reference to their phobia related to computer technology. On the basis of this result, second hypothesis was accepted.

Table 3

Comparison of Scores of Higher Secondary School Teachers of Different Gender on Computer Phobia variable.

Male Teachers N ₁ =51		Female Teachers N ₂ = 66		't' value	Level of Significance
M ₁	σ_1	M ₂	σ_2		
71.13	14.07	79.71	14.91	3.19	Significant at 0.01 level

Table-3 revealed that the mean scores of female teachers ($M_2=79.71$) was quite higher than the male teachers ($M_1=71.13$) which showed that female teachers were more computer phobic than their counterparts male teachers. Also, at the significance level, these two groups of teachers were found with significant difference at 116df, as the calculated 't' value was found to be significant at 0.01 level ($t=3.19$, $p=0.01$). On the basis of this result, third hypothesis was rejected.

Table 4

Comparison of Scores of CBSE Board Higher Secondary School Teachers of Different Gender on Computer Phobia variable.

Male Teachers of CBSE Board N=23		Female Teachers of CBSE Board N=14		't' value	Level of Significance
M ₁	σ_1	M ₂	σ_2		
69.26	12.72	81.71	17.4	2.26	Significant at 0.05 level

The data shown in table reveals that the mean score of CBSE board female teachers ($M_2=81.71$) was quite higher than male teachers ($M_1=69.26$) which shows that female teachers were more computer phobic than their counterparts male teachers of same board. Also, at the significance level, these two groups were found to be with significant difference at, as the calculated 't' value was found to be significant ($t=2.26$, $p=0.05$). On the basis of this result, the fourth hypothesis was totally rejected.

Table 5

Comparison of Scores of ICSE Board Higher Secondary School Teachers of Different Gender on Computer Phobia variable

Male Teachers of ICSE Board N=05		Female Teachers of ICSE Board N=28		't' value	Level of Significance
M ₁	σ_1	M ₂	σ_2		
92	36.8	79.63	14.23	$t=0.66$	NS

Table -5 reveals that the mean score of ICSE board male teachers ($M_1=92$) was higher than their counterparts female teachers of same board ($M_2=79.63$) which shows that male teachers were more computer phobic than female teachers. But, at the significance level these two groups of ICSE board teachers were found insignificantly differ as the calculated 't' value was found to be insignificant ($t=0.66$). On the basis of this result, the fifth hypothesis was accepted.

Table 6

Comparison of Scores of UP Board Higher Secondary School Teachers of Different Gender on Computer Phobia variable

Male Teachers of UP Board N=23		Female Teachers of UP Board N=14		't' value	Level of Significance
M ₁	σ_1	M ₂	σ_2		
69.48	12.65	77.93	13.60	$t=1.83$	NS

Table-6 revealed that the mean score of UP board male teachers ($M_1=69.48$) was lesser than the female teachers ($M_2=77.93$) which showed that male teachers were less computer phobic than their counterparts female teachers of same board. At the significance level, these two groups of UP board teachers were found to be with insignificant difference ($t=1.83$). On the basis of this result, the sixth hypothesis was accepted.

DISCUSSION OF FINDINGS:

The findings of the current investigation may be summarized as follows:

- In reference to the computer phobia, there is a significant difference among higher secondary school teachers of different gender and board.
- In another words, it may concluded that gender and board collectively play a significant role in reference to computer phobia among higher secondary school teachers
- There is insignificant difference among higher secondary school teachers of different boards in reference to the computer phobia,
- In reference to computer phobia, higher secondary school teachers of different gender keep significant difference with each other.
- Male teachers of CBSE and UP boards are less computer phobic than their female counterpart teachers of respective boards.
- CBSE board male and female teachers keep significant difference with each other in reference to the computer phobia.
- ICSE board male and female teachers keep insignificant difference with each other in reference to the computer phobia.
- UP board male and female teachers keep insignificant difference with each other in reference to the computer phobia.

EDUCATIONAL IMPLICATION:

This study may be helpful for modifying computer literacy and education among teachers especially male teachers as well as may be helpful for identifying the causes & problems for computer phobia among teachers by discussing them. This study proved that gender effects the computer phobia among teachers and revealed that generally female teachers are more computer phobic therefore there should be special provisions made for their training and learning computers. It is also helpful in creating learning environment to reduce computer phobia among teachers as well as students. This study may be giving a platform to students and teachers to discuss the related issues and to explore the different opportunities for their career advancement.

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